Optimization for the Masses - NEOS, Benchmarks and (un)expected Progress

This talk will largely address service for the public, from students, to teachers, researchers, and practitioners. Optimization is so ubiquitous and pervasive that interest in it goes beyond traditional groups. About twenty years ago a webpage providing information about optimization with emphasis on available sources including especially software was started. Out of this grew an extensive comparison of optimization software which is known as the »public benchmarks« in contrast to the comparisons by the various developers, both commercial and non-commercial. This publication and its widespread recognition lead to substantial improvements which may not have happened to the same extent otherwise. Many who have to solve an optimization problem cannot easily implement the necessary program themselves, for them an interactive service was established which is the second substantial service component that will be highlighted and demonstrated.